

Supplementary Online Content

Sarvepalli S, Garber A, Rothberg MB, et al. Association of adenoma and proximal sessile serrated polyp detection rates with endoscopist characteristics. *JAMA Surg*. Published online April 17, 2019. doi:10.1001/jamasurg.2019.0564

eAppendix 1. Adjustments for patients and procedural factors.

eAppendix 2. Analyses performed in prior studies.

eFigure 1. Adenoma detection rate (ADR) in all included endoscopists.

eFigure 2. Proximal sessile serrated polyp detection rate (pSSPDR) in all included endoscopists.

This supplementary material has been provided by the authors to give readers additional information about their work.

eAPPENDIX 1

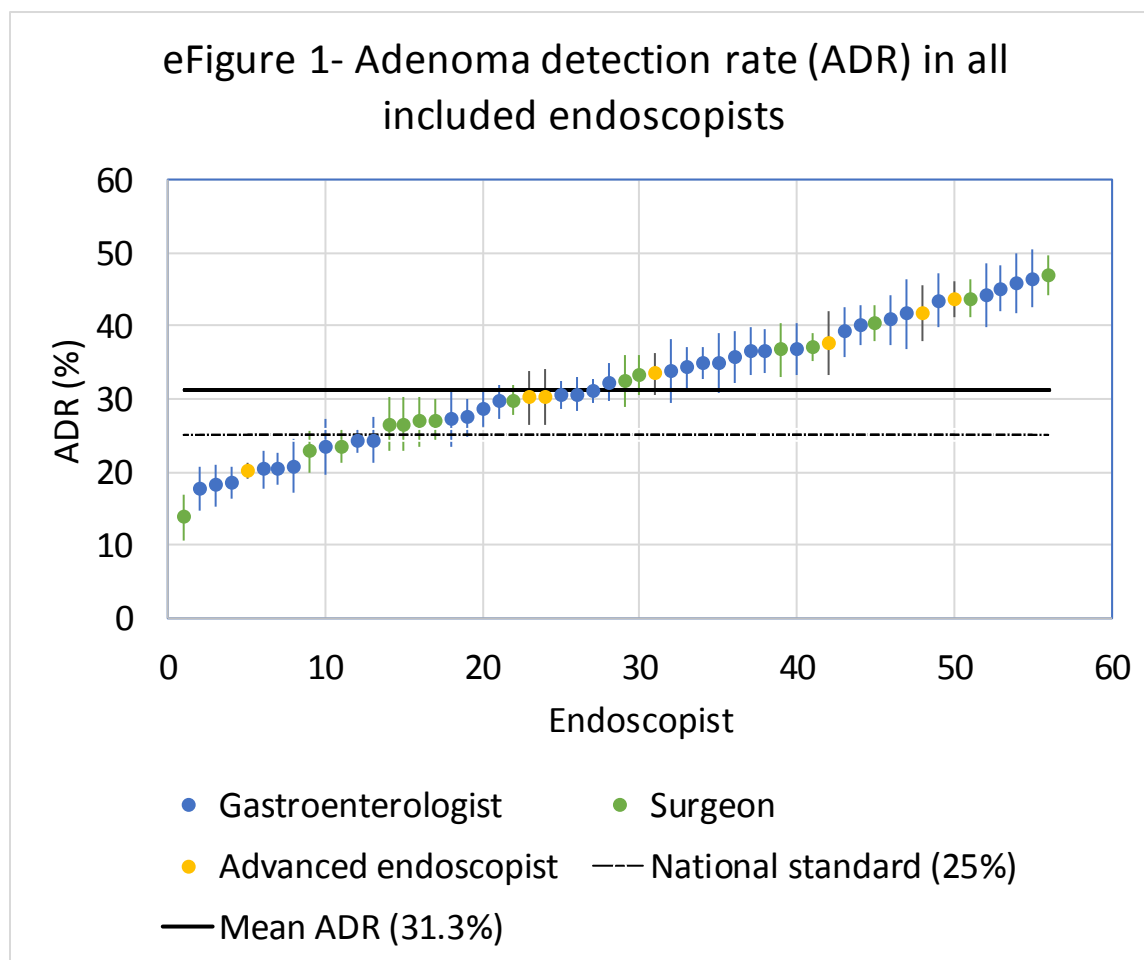
Fixed effects adjusted in the analysis include patient age, gender, race, tobacco use, alcohol abuse, payor type, primary language spoken, body mass index, comorbidities based on diagnostic codes (diabetes, cirrhosis, dementia, stroke, constipation, coronary artery disease, heart failure), American Society of Anesthesiology (ASA) score, medication use (aspirin, statin, calcium supplements, vitamin D supplements, estrogen replacement therapy, angiotensin converting enzyme inhibitors, angiotensin receptor blockers, calcium channel blockers), history of cholecystectomy, colonoscopy time (month of the year and time of the day), location where colonoscopy was performed; colonoscopy characteristics including cecal intubation, withdrawal time, sedation used (general anesthesia vs conscious or monitored anesthesia care) total number of polyps found, polypectomy, quality of bowel preparation; and the aforementioned endoscopist characteristics.

eAPPENDIX 2

Mehrotra, et al. adjusted for patient factors such as age, gender, colonoscopy indication, and endoscopist factors such as gender, years in practice, specialty, volume of procedures performed. Standard errors were clustered at physician level to account for multiple colonoscopies performed by the same physician.(1) Zorzi, et al. adjusted for random effects of individual endoscopist, patient gender, age, cecal intubation, bowel cleansing.(2) Unlike analysis the analysis by Zorzi, et al. our analysis did not also control for fecal immunochemical test, as this was not available. Parikh, et al. adjusted for random effects of individual endoscopists and fixed effects of patient race, gender, time of the day when procedure was performed, quality of bowel preparation, trainee participation, and endoscopist specialty.(3) Crockett, et al. used logistic regression model, included the following covariates: patient characteristics (age, sex, and colonoscopy indication), location of endoscopy site, as well as endoscopist characteristics (sex, specialty, years in practice, and colonoscopy volume, rate of adequate bowel preparation, and cecal intubation rate). Standard errors were clustered at physician level. It is important to note that Crockett et al. used sessile serrated polyp detection rate and not pSSPDR as the dependent variable for the model.(4)

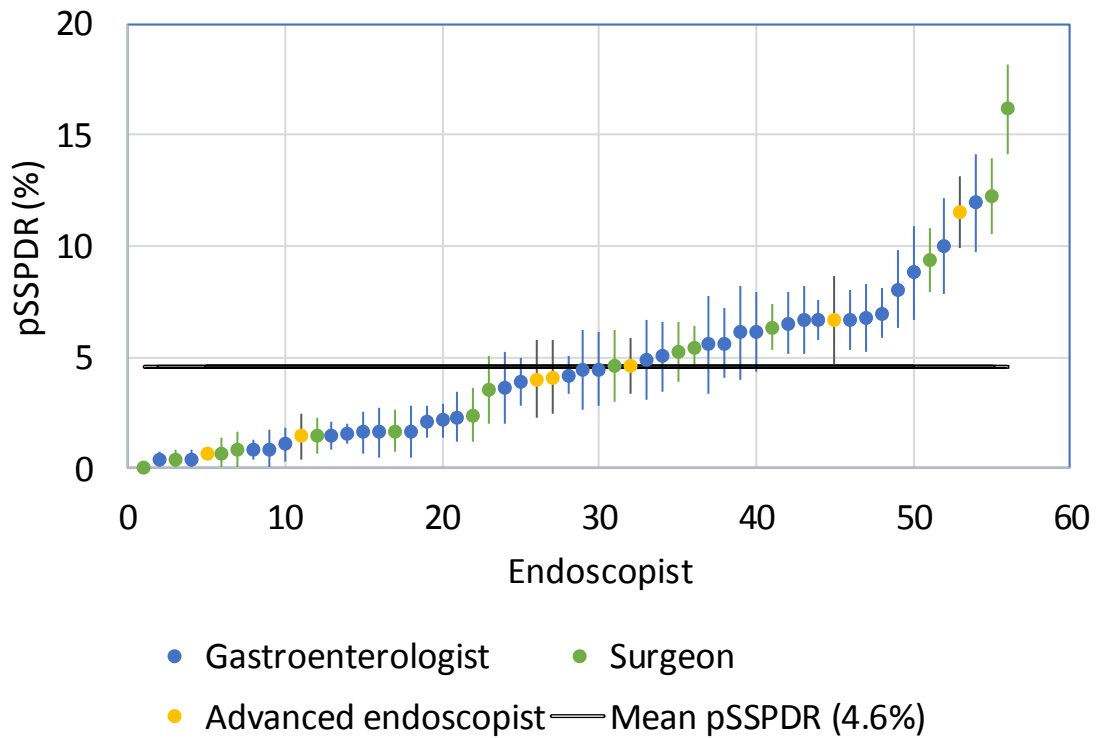
REFERENCES

1. Mehrotra A, Morris M, Gourevitch RA, Carrell DS, Leffler DA, Rose S, et al. Physician characteristics associated with higher adenoma detection rate. *Gastrointest Endosc.* 2018;87(3):778-86 e5.
2. Zorzi M, Senore C, Da Re F, Barca A, Bonelli LA, Cannizzaro R, et al. Quality of colonoscopy in an organised colorectal cancer screening programme with immunochemical faecal occult blood test: the EQUIPE study (Evaluating Quality Indicators of the Performance of Endoscopy). *Gut.* 2015;64(9):1389-96.
3. Parikh MP, Muthukuru S, Jobanputra Y, Naha K, Gupta NM, Wadhwa V, et al. Proximal Sessile Serrated Adenomas Are More Prevalent in Caucasians, and Gastroenterologists Are Better Than Nongastroenterologists at Their Detection. *Gastroenterol Res Pract.* 2017;2017:6710931.
4. Crockett SD, Gourevitch RA, Morris M, Carrell DS, Rose S, Shi Z, et al. Endoscopist factors that influence serrated polyp detection: a multicenter study. *Endoscopy.* 2018.



eFigure 1. Adenoma detection rate (ADR) of individual endoscopists belonging to different specialties. Nine gastroenterologists (26.5%), three surgeons (20%), and one advanced endoscopist (14%) had ADR of less than 25%. Minimum standard for ADR was indicated by a dotted gray line at 25%. Mean ADR was 31.3% and was indicated by a black solid line.

eFigure 2- Proximal Sessile Serrated Polyp Detection Rate (pSSPDR) in all included endoscopists



eFigure 2. Proximal sessile serrated polyp detection rate (pSSPDR) of individual endoscopists belonging to different specialties. Mean pSSPDR was 4.6% and was indicated by the black solid line.